

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

NOV 10 2010

Mr. Jose A. Longo Environmental Affairs Consultant Ambientalistas Puertorriquenos y Asociadeos P. O. Box 3036 Vega Alta, Puerto Rico 00692

Re: EEC Tyre Recycle Machine

Bioteknia Co., 653 Ponce de Leon Ave., San Juan, Puerto Rico

Dear Mr. Longo:

The U.S. Environmental Protection Agency's Region 2 Office (EPA) received your July 1, 2010 letter requesting a Prevention of Significant Deterioration (PSD) applicability determination for the Bioteknia facility located in San Juan, Puerto Rico. We also received additional information via e-mails (the last one was on October 13, 2010) concerning this process. Based on the information provided, EPA is not in a position to render a decision on the PSD applicability of this project for the reasons delineated below.

Background

Bioteknia plans to construct a new facility in Puerto Rico to pyrolyse 3000 metric tons per year of used tires to produce diesel fuel and oils. Bioteknia has indicated that its project is modeled after a technology that is currently used at a plant in Shanghai, China. According to your letter, in this process, shredded tires will be fed to a pyrolysis reactor where they will be thermally decomposed in the absence of oxygen. The decomposed products will be separated into light fuel oil, carbon black and volatile gaseous compounds. The volatile gaseous compounds, primarily methane and hydrogen, will then be treated to remove sulfides and then sent to a furnace for combustion. The furnace gases will be used as a heat source for the pyrolysis reactor. The exhaust from the pyrolysis reactor will be sent to a gas purification system to remove sulfur compounds, nitrogen oxides and particulates before being vented to the atmosphere.

Discussion

EPA is not in the position to render a decision on the PSD applicability of this project due to the lack of essential data. Specific areas of concern include the representativeness of the testing data to the San Juan Project and the lack of information concerning the control equipment. With regard to the testing data, Bioteknia's information was not based on EPA Reference Methods,

was unclear as to the throughput rate during the testing, and did not include all requisite pollutants (i.e., particulates). In addition, no design and operation data was provided for the air pollution control equipment. Without this information, EPA cannot verify your emission estimates even though the estimates that you provided appear to be below the regulatory thresholds for the PSD program.

While there is no legal requirement for Bioteknia to obtain an EPA non-applicability determination, nor there is any provision in the PSD regulations for EPA to provide a PSD applicability determination, EPA can provide input to potential permit applicants based on information that adequately characterizes the project and associated emissions. Therefore, we would need Bioteknia to first conduct its own analyses and applicability determination based upon emission estimates developed pursuant to EPA test methods and appropriate process and control device operation. Bioteknia can use these emission estimates and make its own PSD applicability determination pursuant to the criteria codified at 40 CFR Section 52.21. Please note that Bioteknia will be solely responsible for this determination even if EPA agrees with your analysis. If you determine that the PSD regulations apply, you must obtain the PSD permit prior to construction.

Furthermore, whether PSD applies or not, Bioteknia will need to comply with the Puerto Rico's air quality regulations and obtain a permit that incorporates operating, monitoring and testing conditions for the process and the gas purification system. Bioteknia will also need to determine the applicability of the New Source Performance Standards for the Commercial and Industrial Solid Waste Incineration Units (CISWI) when the rule is finalized. The CISWI rule was proposed on June 4, 2010, and a copy can be obtained from the Office of the Federal Register's web site.

If you have any questions concerning this letter, please contact Mr. Umesh Dholakia, of my staff, at (212) 637-4023.

Sincerely,

Steven C. Riva, Chief Permitting Section

Enclosures

cc:

Louis Sierra, EQB

Leimarys Delgado, EQB